

REMARKS/ARGUMENTS

Claims 1-9 are pending in the application.

Claims 1-9 stand rejected.

Claim 1 has been amended.

Claims 10-17 have been added and accordingly are new.

Claim 1 has been now amended to include the limitation of claim 4 (now canceled).

New claim 10 is identical to original claim 1, which now includes the limitation of prior filed claim 7.

New dependent claims 11-17 are basically identical to the prior filed dependent claims but now depend on newly added claim 10.

The invention as now claimed (currently amended claim 1) provides for a device wherein the cross-sectional area of the light mixing rod decreases from the inlet area to the outlet area. Since, in a light mixing rod, the product of the inlet area with the aperture of the inlet area equals the product of the outlet area with the aperture of the outlet area, a larger aperture is possible at the outlet area. At the same time, the inlet area may be large, which facilitates the coupling-in of the light in the light mixing rod.

The invention further provides (new claim 10) a device in which the light mixing rod comprises a first and second light guiding region for separately guiding components of the coupled-in light due to a partition extending from the inlet area to the outlet area. Thus, it is possible to create an intentional non-uniformity of the luminance in the illuminating field. This non-uniformity may be adapted to uniformly illuminate the surface to be illuminated.

DOUBLE PATENTING

Claims 1-9 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-12 of co-pending Application no. 10/041,008. Applicant is filing herewith with the present amendment a terminal disclaimer to obviate the double patenting rejection. Additionally, it should be noted that co-pending Application No. 10/041,008 filed on January 7, 2002; is now US Patent No. 6,578,999 granted June 17, 2003; and the disclaimer further states that a patent granted on the instant application would not extend beyond the expiration date of the full statutory term defined in 35 U.S.C. 154 to 156 and 173, of prior **Patent No. 6,578,999**.

THE REJECTION UNDER 35 U.S.C. § 102(b)

The rejection of claims Claims 1, 3, 8 and 9 under 35 U.S.C. § 102 (e) as being anticipated by International Publication Number WO 01/82632 A1 to Infocus Corporation is respectfully traversed.

The Examiner states that: "Infocus Corporation discloses a mixing rod with a quadrangular inlet and outlet to guide light from the inlet area to the outlet area with an angle not equal to 90° and a cross-sectional area that converges at the same angles at the inlet area and the outlet area. Additionally, Infocus Corporation discloses a projection device, which generates the illuminated field to form an image."

It is respectfully submitted that the light mixing rod of WO 01/82632 A1 to Infocus Corporation is not the same as the light mixing rod of the instant invention which

requires that the cross-sectional area decreases from the inlet area to the outlet area.

The instant invention as now claimed provides for a device wherein the cross-sectional area of the light mixing rod decreases from the inlet area to the outlet area. Since, in a light mixing rod, the product of the inlet area with the aperture of the inlet area equals the product of the outlet area with the aperture of the outlet area, a larger aperture is possible at the outlet area. At the same time, the inlet area may be large, which facilitates the coupling-in of the light in the light mixing rod.

Accordingly, the present invention as now claimed is fully distinguishable over the WO 01/82632 A1 to Infocus Corporation.

THE REJECTION UNDER 35 U.S.C. § 103 (a)

Claim 2 stands rejected under 35 U.S.C. 103 (a) as being unpatentable over International Publication Number WO 0182632 A1 to Infocus Corporation. The Examiner states that: "Infocus discloses all of the above in claim 1, but fails to disclose a different angle for each of the corners of the quadrangular mixing rod. However, Infocus Corporation does disclose in Figure 8a-h different angles. However, Infocus Corporation only discloses whether each angle is an obtuse, right or acute angle. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have assigned different angle values to each angle as long as the shape remained a quadrangular shape with the angles totaling 360 degrees."

Withdrawal of the rejection of claim 2 is respectfully requested. Claim 2 is now

dependent on amended claim 1 which requires the limitation of canceled claim 4 which requires that the cross-sectional area of the light mixing rod decreases from the inlet area toward the outlet area.

The Infocus Corporation reference is silent regarding the above limitation now included in claim 1.

The rejection of Claims 5 and 6 under 35 U.S.C. 103 (a) as being unpatentable over International Publication Number WO 01/82632 A1 to Infocus Corporation as applied to claim 1 above, and further in view of U.S. Patent 6,443,576B1 to Nishida et al. is courteously traversed. The Examiners states that: "Infocus discloses all of the above in claim 1, but fails to disclose a solid mixing rod made of a light transparent material or a hollow mixing rod with four reflective surfaces inside. Nishida, et al does disclose light being transmitted through a light transmitting rod being reflected off the inner surfaces. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have reflective surfaces inside the rod in order for the light be reflected off the interior surfaces. It would have also been obvious at the time the invention was made to a person having ordinary skill in the art to have used any material optimally suitable for the particular purpose the mixing rod is intended for, such as a light transparent material, since the purpose of the mixing rod is to transmit light through the inlet area and out the outlet area.

As stated above, the invention as now claimed (see currently amended claim 1) requires the limitation that the cross-sectional area of the light mixing rod decreases

from the inlet area toward the outlet area.

Neither Infocus Corporation nor Nishida et al. suggest that the cross-sectional area of the light mixing rod decreases from the inlet area toward the outlet area. Furthermore, there is no motivation in Infocus for the above limitation nor there is motivation in Nishida et al. to combine.

Since Infocus in view of Nishida does not disclose or make obvious the limitation of claim 4 now incorporated into currently amended claim 1, it is believed that the rejection of claims 5 and 6 is now moot.

In view of the above amendments and remarks, it is respectfully submitted that the claims are now in condition for allowance. Reconsideration and withdrawal of the rejections and objections are requested. The Examiner is invited to contact the undersigned at 703-418-2777 if she feels that further discussion may facilitate the resolution of any outstanding issues. An early indication of a Notice of Allowance is earnestly solicited.

Respectfully submitted,



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